

Please amend the application as follows:

IN THE TITLE

Please replace the current title, "ROUTING METHOD AND APPARATUS THAT UTILIZE DIAGONAL ROUTES," with "METHOD AND APPARATUS FOR PRE-COMPUTING ROUTES."

IN THE SPECIFICATION

Please delete the "Claim of Benefit to Prior Application" on page 1, lines 1-11, and insert therein a new Claim of Benefit to Prior Applications as follows:

--CLAIM OF BENEFIT TO PRIOR APPLICATIONS

This application is a continuation application of United States Patent Application entitled "Routing Method and Apparatus that Utilizes Diagonal Routes," filed on December 7, 2001, and having serial number 10/013,819. This patent application also claims the benefit of the earlier-filed U.S. Provisional Patent Application entitled "Method and Apparatus that Utilize Diagonal Routes", having serial number 60/325,748, and filed 1/19/2001; U.S. Provisional Patent Application entitled "Routing Method and Apparatus", having serial number 60/314,580, and filed 8/23/2000; and U.S. Provisional Patent Application entitled "Routing Method and Apparatus", having serial number 60/337,504, and filed 12/6/2001--

Please delete the "Field of the Invention" on page 1, lines 10-12, and insert therein a new Field of the Invention as follows:

P2

--FIELD OF THE INVENTION

The invention provides method and apparatus for pre-computing routes.--

On page 5, lines 1-8, please delete the "Summary of the Invention", and insert therein a new Summary of the Invention as follows:

A3

--SUMMARY OF THE INVENTION

10041957-010702
202010-2561400F

Some embodiments provide a method of pre-computing routes for nets in a region of an integrated circuit ("IC") layout. The method initially defines a set of partitioning lines for partitioning the region into a plurality of sub-regions during a routing operation. For a particular set of potential sub-regions, the method then identifies a set of routes that traverse the particular set of potential sub-regions, where at least one of the identified routes has at least one diagonal edge. The method then stores the identified routes.--

IN THE CLAIMS

Please cancel claims 1-26.

Please add the following claims 27-45.